

COLOR IMAGE PROCESSING APPARATUS AND METHOD FOR COLOR ENHANCEMENT

ABSTRACT

An apparatus and method for pixel color enhancement are provided. The preferred embodiment includes a first circuitry, a second circuitry, a third circuitry, a fourth circuitry. In a preferred embodiment, the apparatus further includes a fifth circuitry. The first circuitry determines and outputs a reference value X . The second circuitry inputs the X , and (R, G, B) and subtracts X from three components (R, G, B) respectively to obtain values of $(R-X)$, $(G-X)$ and $(B-X)$. The third circuitry inputs values of $(R-X)$, $(G-X)$ and $(B-X)$ and scale values of $(R-X)$, $(G-X)$ and $(B-X)$ by a factor S to generate values of $S*(R-X)$, $S*(G-X)$ and $S*(B-X)$. The fourth circuitry 16 respectively adds values of $S*(R-X)$, $S*(G-X)$ and $S*(B-X)$ to three components (R, G, B) to generate three enhanced components (R', G', B') .